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10/760,199	01/21/2004	Kia Silverbrook	WAL19US	1351

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EXAMINER	
MARTINEZ, CARLOS A	

ART UNIT	PAPER NUMBER
2853	

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/760,199	SILVERBROOK ET AL.	
	Examiner	Art Unit	
	Carlos A. Martinez	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-49* is/are pending in the application.

4a) Of the above claim(s) *11,38,39,40,42,43,44,47, and 49* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-10,12-18,21-30,31,32,34,35,37,41, 45,46, and 48* is/are rejected.

7)☒ Claim(s) *6,19,20,33 and 36* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07/06/2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The indicated allowability of claim 11-16 and 48 (of claims filed on 02/16/2006) is withdrawn in view of the newly discovered reference(s) to Silverbrook (US20020154189) or JP2000248217. The rejections based on the newly cited reference(s) are included below.

Drawings

The replacement drawing sheets and annotated sheets were received on 07/06/2006. It is noted that these drawings are acceptable.

Specification

The corrections to the specifications were received on 07/06/2006, and it is noted that these corrections are acceptable

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 11, and 48 of copending Application No. 10/760251 (refer to amended claims of Attorney Docket #: WAL11US). Although the conflicting claims are not identical, they are not patentably distinct from each other because the listed claims (1, 11, and 48) together include all the structure found in claim 1 of the present invention.

Claim 1 of copending Application No. 10/760251 recites a frame in which is located a media path which extends from a media loading area to a winding area, a printhead located across the media path, and a processor which accepts operator inputs which are used to configure the printer for producing a particular roll. However, claim 1 fails to recite that the media loading area is adapted to support a media cartridge in a position so that a media supply slot of the cartridge is closely adjacent to a pilot guide, a motor within the cabinet for advancing a media web out of the media cartridge, or one or more other motors adapted to urge the media along the path and out of the slot. Though this is the case, claim 48 of copending Application No. 10/760251 recites that the media loading area is adapted to support a media cartridge in a position so that a media supply slot of the cartridge is closely adjacent to a pilot guide, a motor within the cabinet for advancing a media web out of the media cartridge, and one or more other motors adapted to urge the media along the path and out of the slot. Further, claim 1 of copending application fails to recite the printhead being mounted on a rail on which it slides into

and out of a printing position across the media path. Though this is the case, claim 11 of copending Application No. 10/760251 recites the printhead being mounted on a rail on which it slides into and out of a printing position across the media path.

Therefore it would have been obvious to one having skill in the art at the time the invention was made to modify the invention of copending Application No. 10/760199 to include a media loading area is adapted to support a media cartridge in a position so that a media supply slot of the cartridge is closely adjacent to a pilot guide, a motor within the cabinet for advancing a media web out of the media cartridge, one or more other motors adapted to urge the media along the path and out of the slot, and the printhead being mounted on a rail on which it slides into and out of a printing position across the media path, as taught by copending Application No. 10/760251, for the purpose of providing a place to load the media to be used by a printer, for there to be a means of moving the media through the printer, and for easy accessibility to the printhead.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 11, 47, and 48 of copending Application No. 10/760230 (refer to Attorney Docket #: WAL0 1US; also PGPUB #: US2005/0156954). Although the conflicting claims are not identical, they are not patentably distinct from each other

because the listed claims (1, 11, 47, and 48) together include all the structure found in claim 1 of the present invention.

Claim 1 of copending Application No. 10/760230 recites a cabinet in which is located a media path which extends from a media loading area to a winding area, a printhead, and a processor which accepts operator inputs which are used to configure the printer for producing a particular roll. However, claim 1 fails to recite that the media loading area is adapted to support a media cartridge in a position so that a media supply slot of the cartridge is closely adjacent to a pilot guide, a motor within the cabinet for advancing a media web out of the media cartridge, one or more other motors adapted to urge the media along the path and out of the slot, or that the printhead is located across the media path. Though this is the case, claim 48 of copending Application No. 10/760230 recites that the media loading area is adapted to support a media cartridge in a position so that a media supply slot of the cartridge is closely adjacent to a pilot guide, a motor within the cabinet for advancing a media web out of the media cartridge, one or more other motors adapted to urge the media along the path and out of the slot, and that the printhead is located across the media path. Further, claim 1 of copending application fails to recite the printhead being mounted on a rail on which it slides into and out of a printing position across the media path. Though this is the case, claims 11 and 47 of copending Application No. 10/760230 recites the printhead being mounted on a rail on which it slides into and out of a printing position across the media path.

Therefore it would have been obvious to one having skill in the art at the time the invention was made to modify the invention of copending Application No. 10/760199 to include a media loading area is adapted to support a media cartridge in a position so that a media supply slot of the cartridge is closely adjacent to a pilot guide, a motor within the cabinet for advancing a media web out of the media cartridge, one or more other motors adapted to urge the media along the path and out of the slot, and that the printhead is located across the media path, and the printhead being mounted on a rail on which it slides into and out of a printing position across the media path, as taught by copending Application No. 10/760230, for the purpose of providing a place to load the media to be used by a printer, for there to be a means of moving the media through the printer, for a printhead to be in a position to engage the media, and for easy accessibility to the printhead.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and JP2000248217.

- Matsumoto discloses a printing device with a media loading area (refer to element 11 of Fig. 1) adapted to support a media cartridge (refer to element 18 of Fig. 1) in a position so that a media supply slot of the cartridge is closely adjacent to a media guide (refer to elements 25, 26, and 27 of Fig. 1), a printhead located across the media path (refer to element 30 of Fig. 1); a motor for advancing a media web (refer to element 31 of Fig. 1) out of the media cartridge, and one or more other motors adapted to urge the media along the path and out of the slot (refer to elements 31 and 53 of Fig. 1). It should be noted that since there is no specific range or value given to the meaning of "closely adjacent", anything reasonably adjacent – to one skilled in the art – would sufficiently meet such set forth limitation(s).
- Though Matsumoto speaks of a processor/system controller (refer to element 16 of Fig. 1), Matsumoto fails to specifically mention that the processor accepts operator inputs, which are used to configure the printer for producing a particular roll. Also, Matsumoto fails to specifically mention a cabinet housing a media path that extends from the media guide to a printed media dispensing slot. Also Matsumoto fails to specifically mention the printhead being mounted on a rail on which it slides into and out of a printing position across the media path.
- Martin teaches a cabinet housing a media path that extends from the media guide to a printed media dispensing slot (refer to outer structure that houses components of element 18 of Fig. 2) and a processor that accepts operator inputs, which are used to

configure the printer for producing a particular roll (refer to element 38 of Fig. 2 and paragraph [0009] and [0010]). Further, JP2000248217teaches the printhead being mounted on a rail on which it slides into and out of a printing position across the media path (refer to element 1100; also paragraphs [0052] and [0053] of JPO English translation).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto, with a cabinet housing a media path that extends from the media guide to a printed media dispensing slot and a processor that accepts operator inputs, which are used to configure the printer for producing a particular roll, as taught by Martin and Silverbrook, for the purpose of providing a housing/protective covering for a printer, accessible high quality printing, and a processor that is responsive to the needs of a user.

6. Also, claims 1, 5, 7, 12-14, 17, 21-27, 37, 41, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834).

- Matsumoto discloses a printing device with a media loading area (refer to element 11 of Fig. 1) adapted to support a media cartridge (refer to element 18 of Fig. 1) in a position so that a media supply slot of the cartridge is closely adjacent to a media guide (refer to elements 25, 26, and 27 of Fig. 1), a printhead located across the media path (refer to element 30 of Fig. 1); a motor for advancing a media web (refer

to element 31 of Fig. 1) out of the media cartridge, and one or more other motors adapted to urge the media along the path and out of the slot (refer to elements 31 and 53 of Fig. 1). It should be noted that since there is no specific range or value given to the meaning of "closely adjacent", anything reasonably adjacent – to one skilled in the art – would sufficiently meet such set forth limitation(s).

- Though Matsumoto speaks of a processor/system controller (refer to element 16 of Fig. 1), Matsumoto fails to specifically mention that the processor accepts operator inputs, which are used to configure the printer for producing a particular roll. Also, Matsumoto fails to specifically mention a cabinet housing a media path that extends from the media guide to a printed media dispensing slot. Also Matsumoto fails to specifically mention the printhead being mounted on a rail on which it slides into and out of a printing position across the media path.
- Martin teaches a cabinet housing a media path that extends from the media guide to a printed media dispensing slot (refer to outer structure that houses components of element 18 of Fig. 2) and a processor that accepts operator inputs, which are used to configure the printer for producing a particular roll (refer to element 38 of Fig. 2 and paragraph [0009] and [0010]). Further, Silverbrook teaches the printhead being mounted on a rail on which it slides into and out of a printing position across the media path (refer to paragraphs [0013], [0014] and [0057]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto, with a cabinet housing a media path that extends from the media guide to a printed media

dispensing slot and a processor that accepts operator inputs, which are used to configure the printer for producing a particular roll, as taught by Martin and Silverbrook, for the purpose of providing a housing/protective covering for a printer, accessible high quality printing, and a processor that is responsive to the needs of a user.

With respect to claim 5, Matsumoto teaches a motor that is responsive to a processor (refer to lines 17-21 of column 5).

With respect to claim 7, Matsumoto fails to disclose a front exterior surface of a cabinet with a video display for displaying information about wallpaper that the printer may print; however, Martin discloses a front exterior surface of a cabinet/housing with a video display (refer to element 34 of Fig. 2) for displaying information about wallpaper that the printer may print (refer to paragraph [0010]). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto, with a front exterior surface of a cabinet/housing with a video display for displaying information about wallpaper that the printer may print, as taught by Martin, for the purpose of providing visual feedback of the parameters that are set to be printed out.

With respect to claims 12, 13, and 14,

- Matsumoto discloses a multi-color printhead (refer to lines 61-67 of column 5).

- However, Matsumoto (in view of Martin) fails to specifically mention that the printhead is supplied by separate ink reservoirs, the reservoirs connected to the printhead by a number of ink supply tubes, there being a tube disconnect coupling between the reservoirs and the printhead, and an air supply and a tube for bringing a supply of air to the printhead which supply prevents media from contacting the printhead. Also, Matsumoto (in view of Martin) fails to specifically mention a capper motor, the capper motor driving a capping device; the capping device sealing the printhead with a cap when not in use, in order to prevent contamination from entering the printheads.
- Silverbrook teaches a printhead supplied by separate ink reservoirs, the reservoirs connected to the printhead by a number of ink supply tubes, there being a tube disconnect coupling between the reservoirs and the printhead (refer to paragraphs [0057] and [0059]). Also, Silverbrook teaches an air supply and a tube/housing for bringing a supply of air to the printhead which supply prevents media from contacting the printhead (refer to paragraph [0075]). Further, Silverbrook teaches a capper motor, the capper motor driving a capping device; the capping device sealing the printhead with a cap when not in use, in order to prevent contamination from entering the printheads (refer to paragraphs [0061], [0062], and [0081]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin), with a printhead supplied by separate ink reservoirs, the reservoirs connected to the printhead by a number of ink supply tubes, there being a tube

disconnect coupling between the reservoirs and the printhead, and an air supply and a tube for bringing a supply of air to the printhead which supply prevents media from contacting the printhead, and a capper motor, the capper motor driving a capping device; the capping device sealing the printhead with a cap when not in use, in order to prevent contamination from entering the printheads, as taught by Silverbrook, for the purpose of providing ease of removal and replacement with respect to an ink distribution arrangement and protection from debris for the printhead.

With respect to claim 17, Matsumoto discloses a path comprised of a generally straight path (refer to path of media in Fig. 1).

With respect to claims 21-23,

- Matsumoto (in view of Martin) teaches a printhead used in media web printing; however, Matsumoto (in view of Martin) fails to specifically teach a printhead that can print at a rate exceeding 0.02 square meters per second (775 square feet per hour), 0.1 square meters per second (3875 square feet per hour), or 0.2 square meters per second (7750 square feet per hour).
- Silverbrook teaches a printhead that can print at a rate exceeding 775 square feet per hour, 3875 square feet per hour, and 7750 square feet per hour (refer to chart located at the bottom of page 9). It should be noted that this reference teaches the preferred printhead that applicant refers to in their disclosure (refer to the specification of applicant, lines 15-26 of page 39).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin), with a printhead that can print at a rate exceeding 775 square feet per hour, 3875 square feet per hour, and 7750 square feet per hour, as taught by Silverbrook, for the purpose of providing an increased printing rate.

With respect to claims 24-27,

- Matsumoto (in view of Martin) teaches a printhead; however, Matsumoto (in view of Martin) fails to specifically teach a printhead that has more than 7680 nozzles, 20000 nozzles, or 250000 nozzles.
- Silverbrook teaches a printhead that has more than 7680 nozzles, 20000 nozzles, and 250000 nozzles (refer to paragraph [0093]). It should be noted that this reference teaches the preferred printhead that applicant refers to in their disclosure (refer to the specification of applicant, lines 15-26 of page 39).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin), with a printhead that has more than 7680 nozzles, 20000 nozzles, and 250000 nozzles, as taught by Silverbrook, for the purpose of providing improved image quality.

With respect to claim 37 and 41,

- Matsumoto discloses a printing device with a printhead located in the media path (refer to element 30 of Fig. 1).
- Though Matsumoto speaks of a processor/system controller (refer to element 16 of Fig. 1), Matsumoto fails to specifically mention that the processor accepts operator inputs from one or more input devices which are used to configure the printer for producing a particular roll. Also, Matsumoto fails to specifically mention a cabinet or frame in which is located a media path which extends from a media loading area to a winding area or a winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer wherein, the length and design of the roll are determined by the operator inputs.
- Martin teaches a structure for housing, cabinet or frame, a media path that extends from the pilot guide to a printed media dispensing slot (refer to outer structure that houses components of element 18 of Fig. 2) and a processor that accepts operator inputs from one or more input devices (refer to elements 30, 36, and 37) which are used to configure the printer for producing a particular roll (refer to element 38 of Fig. 2 and paragraph [0009] and [0010]), and a winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer wherein, the length and design of the roll are determined by the operator inputs (refer to element 26, paragraph [0009], and paragraph [0010]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto, with a cabinet in which is located a media path which extends from a media loading area to

a winding area or a winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer wherein, the length and design of the roll are determined by the operator inputs, as taught by Martin, for the purpose of providing a housing/protective covering for a printer, an area for collecting the outputted wallpaper, and a processor that is responsive to the needs of a user.

With respect to claim 48,

- Matsumoto discloses a color printhead (refer to lines 61-67 of column 5).
- However, Matsumoto (in view of Martin) fails to specifically mention a full width stationary printhead located on a rail along which it slides for service and removal; a number of replaceable ink reservoirs which supply the printhead with different inks; the printhead which is at least as wide as the web; and the printhead being supplied with the different inks through tubes which can be disconnected so the printhead may be removed.
- Silverbrook teaches a full width stationary printhead (refer to abstract) located on a rail along which it slides for service and removal (refer to paragraphs [0013], [0014], and [0057]); a number of replaceable ink reservoirs which supply the printhead with different inks (refer to paragraphs [0057] and [0064]); the printhead which is at least as wide as the web (refer to abstract); and the printhead being supplied with the different inks through tubes which can be disconnected so the printhead may be removed (refer to paragraphs [0057] and [0059]).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin), with a full width stationary printhead located on a rail along which it slides for service and removal; a number of replaceable ink reservoirs which supply the printhead with different inks; the printhead which is at least as wide as the web; and the printhead being supplied with the different inks through tubes which can be disconnected so the printhead may be removed, as taught by Silverbrook, for the purpose of providing ease of removal and replacement with respect to an ink distribution arrangement and fast printing from a pagewidth printhead.

7. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of Kwasny (US6554511).

- Matsumoto (in view of Martin and Silverbrook) teaches a cutting mechanism (refer to elements 51 and 55 of Fig. 1), but fails to teach a slitting mechanism in the cabinet adapted to longitudinally slit the media web, to different widths, as required and in accordance with instructions provided by a user.
- Kwasny teaches a slitting mechanism (refer to element 16 of Fig. 2) in the cabinet adapted to longitudinally slit the media web, to different widths, as required and in accordance with instructions provided by a user (refer to lines 22-30 of column 3 and lines 28-43 of column 7).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook), with a slitting mechanism (refer to element 16 of Fig. 2) in the cabinet adapted to longitudinally slit the media web, to different widths, as required and in accordance with instructions provided by a user, as taught by Kwasny, for the purpose of providing a varying widths of printed material in response to the needs of a user.

With respect to claim 3,

- Matsumoto (in view of Martin and Silverbrook) teaches a cutting mechanism (refer to elements 51 and 55 of Fig. 1), but fails to teach a cutting mechanism located between the printhead and a slot and adapted to divide with a transverse cut, the media web in accordance with instructions provided by the processor.
- Kwasny teaches a cutting mechanism (refer to element 14 of Fig. 2) located between the printhead (refer to element 12 of Fig. 2) and a slot (refer to opening where paper exits printer housing in Fig. 1) and adapted to divide with a transverse cut, the media web in accordance with instructions provided by the processor (refer to lines 66-67 of column 4 and lines 1-11 of column 5).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook), with a cutting mechanism located between the printhead and a slot and adapted to divide with a transverse cut, the media web in accordance

with instructions provided by the processor, as taught by Kwasny, for the purpose of providing a varying lengths of printed material in response to the needs of a user.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of Anselmo (US4577585).

- Matsumoto (in view of Martin and Silverbrook) teaches a drying, after a printhead, with hot air (refer to lines 26-30 of column 9), but fails specifically show an internal dryer or that the drying occurs before an exit slot.
- Anselmo discloses a dryer that is internal (refer to lines 1-12 of column 4) and that is located before an exit slot (refer to exit slot following element 70 of Fig. 1).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook), with a dryer that is internal and that is located before an exit slot, as taught by Anselmo, for the purpose of providing a protected environment for drying of a printed material before being dispensed.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 7 above, and further in view of Cruikshank (US2004/0090468).

- Matsumoto (in view of Martin and Silverbrook) teaches a video display, but fails specifically mention that the video display is a touchscreen which can receive operator selections for use by the processor.
- Cruikshank discloses a video display that is a touchscreen that can receive operator selections for use by the processor (refer to paragraphs [0028] and [0029]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook), with a video display that is a touchscreen that can receive operator selections for use by a processor, as taught by Cruikshank, for the purpose of providing instructions for use by a processor without having to utilize extra peripherals such as a keyboard and mouse.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of Inoue (US5978555).

- Matsumoto (in view of Martin and Silverbrook) teaches a media cartridge, but fails to specifically mention that the media cartridge is accessible through a service door that provides access to a loading area.
- Inoue discloses a media cartridge (refer to element 48) is accessible through a service door (refer to element 50), which provides access to a loading area (refer to element 40 and lines 42-46 of column 6).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook), with a media cartridge is accessible through a service door that provides access to a loading area, as taught by Inoue, for the purpose of providing protected and inconspicuous area of media loading. Further, it should be noted that the characteristics of the media cartridge (i.e. handle) is not considered since it does not have any patentable weight because the claimed invention is towards a printer.

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692), Silverbrook (US2002/0180834), and Inoue (US5978555), as applied to claim 9 above, and further in view of Hoene (US2003/0113148).

- Matsumoto (in view of Martin, Silverbrook, and Inoue) teaches a media cartridge loading area.
- However, Matsumoto (in view of Martin, Silverbrook, and Inoue) fails to disclose a loading area comprised of one or more locations where media can be stored.
- Hoene discloses a loading area comprised of one or more locations where media can be stored (refer to paragraph [0025]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin, Silverbrook, and Inoue), with a loading area comprised of one or more

locations where media can be stored, as taught by Hoene, for the purpose of providing easy access to a ready supply of print media.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of WO0189848.

- Matsumoto (in view of Martin and Silverbrook) teaches a capper.
- However, Matsumoto (in view of Martin and Silverbrook) fails to specifically mention where the capper device further comprises a blotter, which moves into and out of position and which is used for absorbing ink fired from the printheads.
- WO0189848 teaches where the capper device further comprises a blotter, which moves into and out of position and which is used for absorbing ink fired from the printheads (refer to lines 8-31 of page 6).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook), where the capper device further comprises a blotter, which moves into and out of position and which is used for absorbing ink fired from the printheads, as taught by WO0189848, for the purpose of providing proper maintenance of the printhead.

13. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of WO0189848.

- Matsumoto (in view of Martin and Silverbrook) fails to specifically mention one or more rail microadjusters for accurately adjusting a gap between the printhead and the media onto which it is printing.
- WO0189848 teaches one or more rail microadjusters for accurately adjusting a gap between the printhead and the media onto which it is printing (refer to lines 38-43 of page 6 and lines 1-11 of page 7).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook), with one or more rail microadjusters for accurately adjusting a gap between the printhead and the media onto which it is printing, as taught by WO0189848, for the purpose of providing proper distance between paper and printhead.

14. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of Yraceburu (US2002/0067401).

- Matsumoto (in view of Martin and Silverbrook) teaches a pre-heating means (refer to element 35 of Fig. 1) located before the printhead.

- However, Matsumoto (in view of Martin and Silverbrook) fails to teach a pre-heater platen located under the path and before the printhead.
- Yraceburu discloses a pre-heater platen located under the path and before the printhead (refer to element 42 of Fig. 1A and paragraph [0014]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook), with a pre-heater platen located under the path and before the printhead, as taught by Yraceburu, for the purpose of providing improved ink drying and print quality.

15. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of Tsuchii (US6830317).

- Matsumoto (in view of Martin and Silverbrook) fails to specifically teach a printhead that prints ink drops with a volume of less than 5 picoliters, 3 picoliters, or 1.5 picoliters.
- Tsuchii teaches a printhead that prints ink drops with a volume of less than 5 picoliters, 3 picoliters, and 1.5 picoliters (refer to Table 2 and lines 34-43 of column 1).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook), with a printhead that prints ink drops with a volume of less

than 5 picoliters, 3 picoliters, and 1.5 picoliters, as taught by Tsuchii, for the purpose of providing improved image quality.

16. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of Silverbrook (US2002/0191049).

- Matsumoto (in view of Martin and Silverbrook (US2002/0180834)) teaches, as applied to claim 1 above, a cabinet in which is located a media path which extends from a media cartridge loading area to a winding area, a processor which accepts operator inputs which are used to configure the printer for producing a particular roll, and the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer (refer to Martin, paragraph [0009] and element 26). Matsumoto (in view of Martin and Silverbrook (US2002/0180834)) fails to specifically teach a full width digital color printhead.
- Silverbrook (US2002/0191049) teaches a full width digital color printhead (refer to abstract and paragraph [0029]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook (US2002/0180834)), with a full width digital color printhead, as taught by Silverbrook (US2002/0191049), for the purpose of providing digital printing.

17. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of Zander (US5200777) and Kawamura (US6249301).

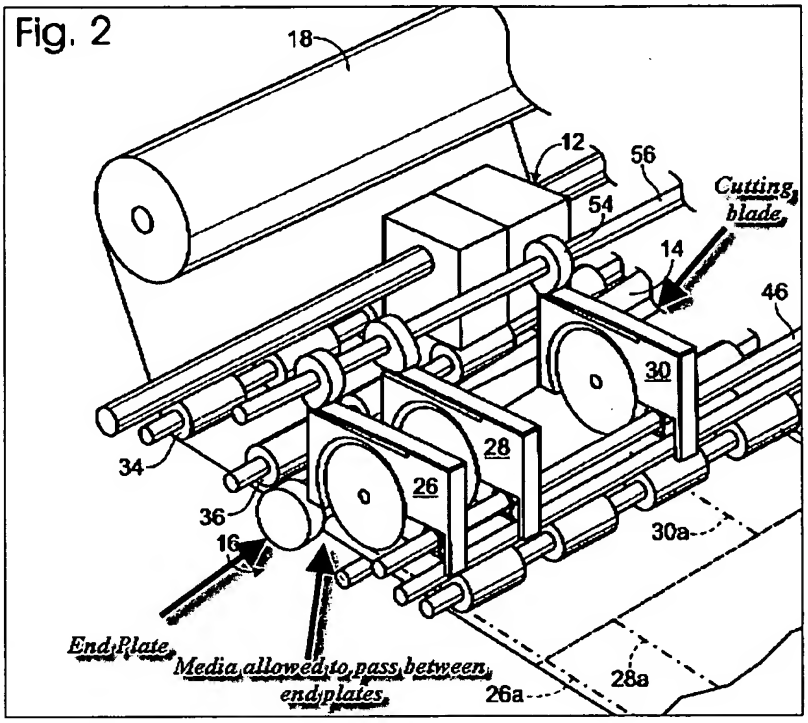
- Matsumoto (in view of Martin and Silverbrook) teaches a media cartridge with a roll of blank media and an internal roller; however, Matsumoto (in view of Martin and Silverbrook) fails to specifically mention a media cartridge that has a case having two halves, hinged together, an area between the two halves, when closed, defining a media supply slot; and the case having internally and adjacent to the slot, a pair of rollers, at least one of the rollers being a driven roller which is supported at each end, by the case, for rotation by an external motor.
- Zander teaches a media cartridge that has a case having two halves, hinged together (refer to element 11 of Fig. 8), an area between the two halves (refer to elements 7 and 9 of Fig. 8), when closed, defining a media supply slot (refer to element 47 of Fig. 8); however, Zander fails to teach that the case has internally and adjacent to the slot, a pair of rollers, at least one of the rollers being a driven roller which is supported at each end, by the case, for rotation by an external motor. Kawamura teaches a media cartridge that has a case which has internally and adjacent to the slot, a pair of rollers (refer to element 23 of Fig. 4), at least one of the rollers being a driven roller which is supported at each end (refer to element 23a of Fig. 4), by the case, for rotation by an external motor (refer to lines 1-7 of column 4).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook), with a media cartridge that has a case having two halves, hinged together, an area between the two halves, when closed, defining a media supply slot; and the case having internally and adjacent to the slot, a pair of rollers, at least one of the rollers being a driven roller which is supported at each end, by the case, for rotation by an external motor, as taught by Zander and Kawamura, for the purpose of providing easily accessible media supply container.

18. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of Kwasny (US6554511).

- Matsumoto (in view of Martin and Silverbrook) teaches, as applied to claim 1 above, a cutter; however, Matsumoto (in view of Martin and Silverbrook) fails to teach that the cutter is a transverse cutter that has a chassis having end plates, the end plates being separated to allow a web of media to pass between them, the end plates supporting between them a cutting blade, and the blade supported at each end to perform a cutting motion which begins on one side of the web and finishes on an opposite side of the web.
- Kwasny teaches a traverse cutter (element 14 of Fig. 2 and abstract) that has a chassis having end plates, the end plates being separated to allow a web of media to

pass between them (refer to ends of element 14 of Fig. 2), the end plates supporting between them a cutting blade (refer to blade on element 14 of Fig. 2),



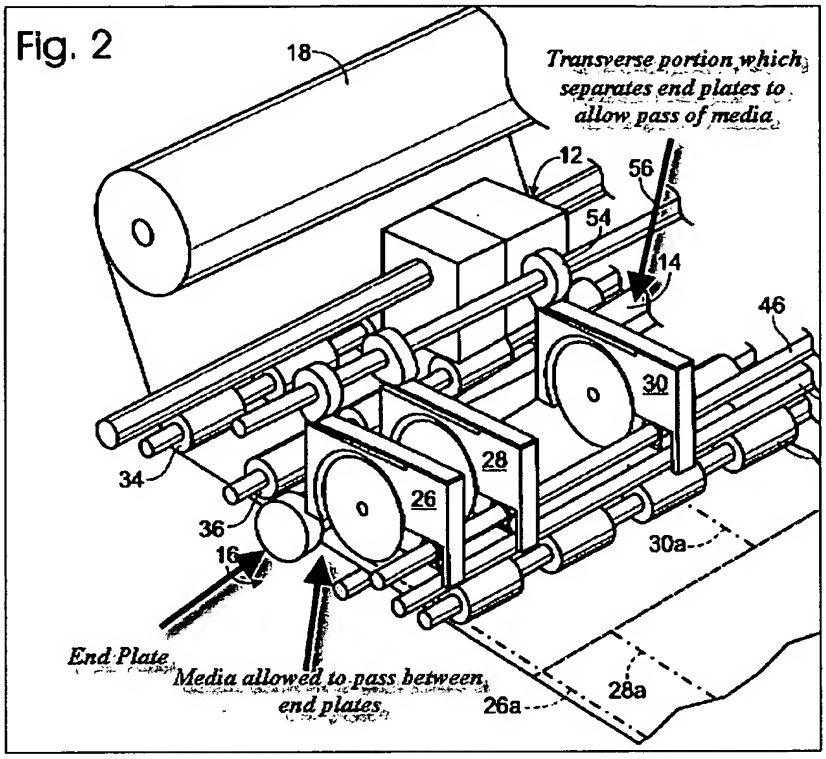
and the blade supported at each end to perform a cutting motion which begins on one side of the web and finishes on an opposite side of the web (refer to lines 12-28 of column 5).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook), with a traverse cutter that has a chassis having end plates, the end plates being separated to allow a web of media to pass between them, the end plates supporting between them a cutting blade, and the blade supported at each end to perform a cutting motion which begins on one side of the web and finishes on an

opposite side of the web, as taught by Kwasny, for the purpose of providing a varying lengths of printed material in response to the needs of a user.

19. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of Kwasny (US6554511).

- Matsumoto (in view of Martin and Silverbrook) fails to specifically teach a slitting mechanism which has a chassis having end plates, the end plates being separated by a transverse portion of the chassis to allow a web of media to pass between them, one or more rotating slitting shafts extending between the end plates, each shaft having one or more slitters arranged along its length, each slitter having a cutting edge; and the slitting mechanism selectively engageable to either enter or not enter a path followed by the web according to an input provided by an operator of the printer.
- Kwasny teaches a slitting mechanism (refer to lines 22-30 of column 3) which has a chassis having end plates, the end plates being separated by a transverse portion of the chassis to allow a web of media to pass between them, one or more rotating slitting shafts extending between the end plates,



one or more rotating slitting shafts extending between the end plates, each shaft having one or more slitters arranged along its length, each slitter having a cutting edge (refer to lines 10-21 of column 4 and lines 56-59 of column5); and the slitting mechanism selectively engageable to either enter or not enter a path followed by the web (refer to lines 4-18 of column 6) according to an input provided by an operator of the printer (refer to lines 28-43 of column 7).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook), with a slitting mechanism which has a chassis having end plates, the end plates being separated by a transverse portion of the chassis to allow a web of media to pass between them, one or more rotating slitting shafts extending between the end plates, each shaft having one or more slitters arranged along its

length, each slitter having a cutting edge; and the slitting mechanism selectively engageable to either enter or not enter a path followed by the web according to an input provided by an operator of the printer, as taught by Kwasny, for the purpose of providing a varying widths of printed material in response to the needs of a user.

20. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of Miller (US6068370) and McClelland (US6135586).

- Matsumoto (in view of Martin and Silverbrook) teaches a color printhead located across a path; however, Matsumoto (in view of Martin and Silverbrook) fails to specifically mention a printhead that is a full width printhead located across the path where the printhead is being supplied with a number of different inks which are remote from the printhead and which supply the printhead through tubes.
- Miller teaches a printhead which is supplied with a number of different inks which are remote from the printhead (refer to element 206 of Fig. 6 and element 30 of Fig. 3) and which supply the printhead through tubes (refer to element 36 of Fig. 3); however, Miller fails to teach that the printhead is a full width printhead. McClelland teaches a full width printhead (refer to Fig. 1 and lines 60-67 of column 1).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of

Martin and Silverbrook), with a printhead that is a full width printhead located across the path where the printhead is being supplied with a number of different inks which are remote from the printhead and which supply the printhead through tubes, as taught by Miller and McClelland, for the purpose of providing quick web adapted printing without needing a traversing printhead and a easily accessible way to supply ink.

21. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US6575546) in view of Martin (US2002/0171692) and Silverbrook (US2002/0180834), as applied to claim 1 above, and further in view of Miller (US6068370) and Silverbrook (US2002/0191049).

- Matsumoto (in view of Martin and Silverbrook(US2002/0180834)) teaches a housing in which is located a media path which extends from a blank media intake to a wallpaper exit slot, one or more input devices for capturing operator instructions, a processor which accepts operator inputs which are used to configure the printer for producing a particular roll; however, Matsumoto (in view of Martin and Silverbrook (US2002/0180834)) fails to specifically mention a printhead that is a multi-color roll width removable printhead located in the housing and across the media path or that the printhead is being supplied by separate ink reservoirs, the reservoirs connected to the printhead by a an ink supply harness, there being a disconnect coupling between the reservoirs and the printhead.

- Miller teaches a printhead is being supplied by separate ink reservoirs (refer to element 30 of Fig. 3), the reservoirs connected to the printhead by a an ink supply harness (refer to element 36 of Fig. 3), there being a disconnect coupling between the reservoirs and the printhead (refer to element 66 of Fig. 4); however, Miller fails to specifically teach that the printhead is a removable full width printhead. Silverbrook (US2002/0191049) teaches a removable/mountable full width printhead (refer to abstract and paragraph [0005]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a printing device, as taught by Matsumoto (in view of Martin and Silverbrook (US2002/0180834)), with a printhead that is a multi-color roll width removable printhead located in the housing and across the media path or that the printhead is being supplied by separate ink reservoirs, the reservoirs connected to the printhead by a an ink supply harness, there being a disconnect coupling between the reservoirs and the printhead, as taught by Miller and Silverbrook (US2002/0191049), for the purpose of providing quick web adapted printing without needing a traversing printhead and a easily accessible way to supply ink.

Allowable Subject Matter

22. Claims 6, 19, 20, 33, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

23. The following is a statement of reasons for the indication of allowable subject matter: Claimn 6 is allowable over the art of record because the prior art does not teach a wallpaper printer that has a well, external to the cabinet and adjacent to a printed media dispensing slot; the well having at each end, spindles for aligning, retaining and removing a core, at least one spindle being motorized to rotate the core.

Claims 19 and 20 are allowable over the art of record because the prior art does not teach a wallpaper printer that has a door which covers an opening into a lower compartment of the dryer that is moveable from a closed position which covers the opening, to an open position in which the media passes through the opening into the lower compartment and out of the compartment, also through the opening forming a catenary path.

Claim 33 is allowable over the art of record because the prior art does not teach a wallpaper printer that is adapted for use with a consumer tote for a roll of wallpaper that has a disposable exterior in which is formed a main access flap and a pair of core access openings; and where the tote has an interior in which is located a disposable core which is aligned with the access openings.

Claim 36 is allowable over the art of record because the prior art does not teach a wallpaper printer that includes a dryer having a compartment with a top opening for receiving a media web

fed from the printer or a source of heated air located above the top opening for blowing heated air into the opening to dry printing on the media web.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos A. Martinez whose telephone number is (571) 272-8349. The examiner can normally be reached on 8:30 am - 5:00 pm (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEPHEN D. MEIER can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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CAM
09/01/2006

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